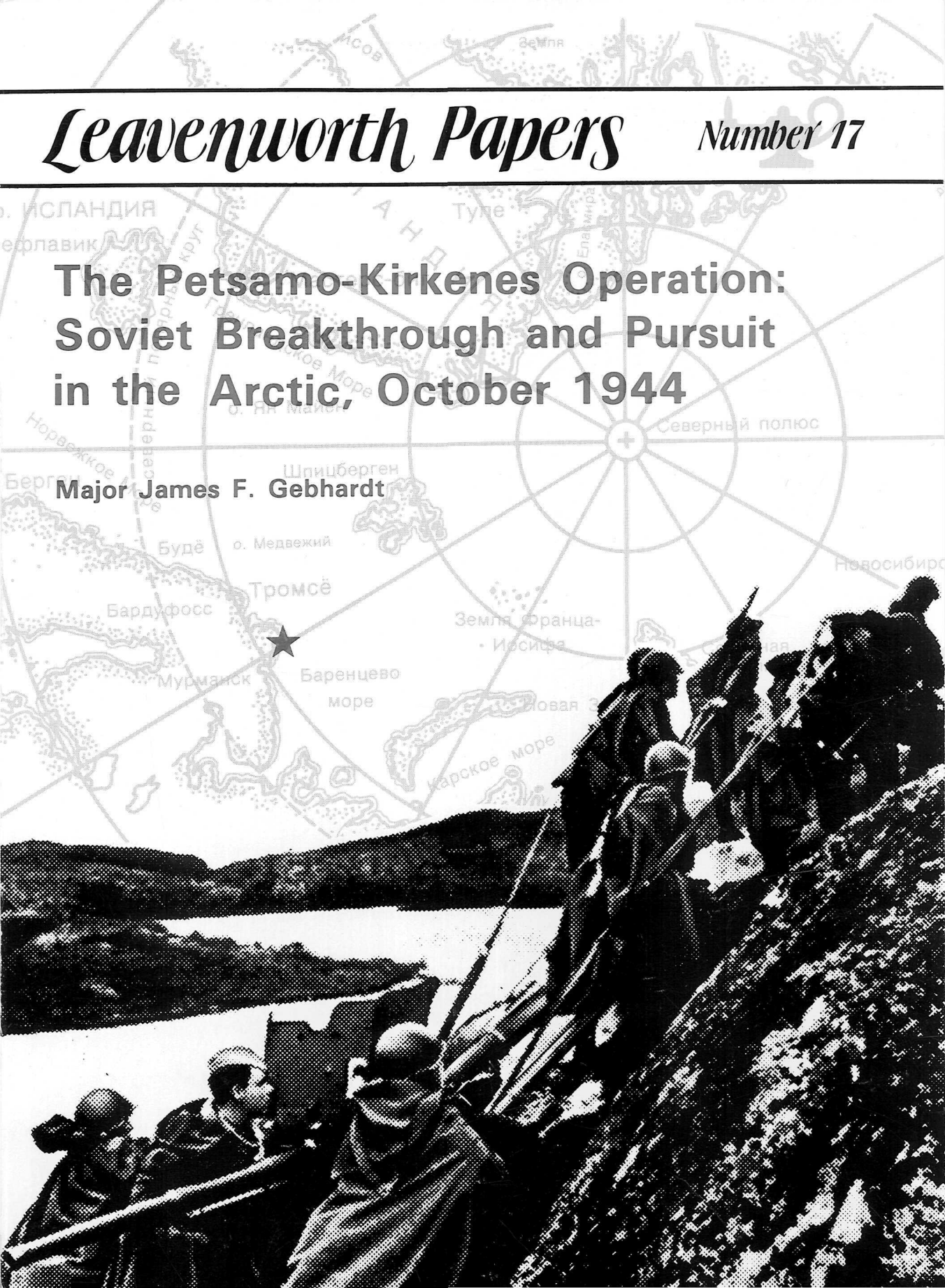


# *Leavenworth Papers*

Number 17

## **The Petsamo-Kirkenes Operation: Soviet Breakthrough and Pursuit in the Arctic, October 1944**

Major James F. Gebhardt



## FOREWORD

Nearly forty-five years after the end of World War II, many of the important battles of the Eastern Front have not been thoroughly researched by Western military historians. Major James F. Gebhardt, a Soviet foreign area officer, describes a battle that has remained virtually unknown in the English-speaking world. The Petsamo-Kirkenes Operation has remained obscure partly because it was fought on the far northern flank of the Soviet-German front—away from major centers of population, industry, or government. The German and Soviet generals who fought this battle are also not as well known to the American officer corps as the more famous and fashionable Guderian, Rommel, Manstein, or Zhukov. In Western general histories of the Soviet-German war, this operation normally receives one or two sentences and a single, minuscule map arrow—if it is mentioned at all. The comprehensive accounts of the battle that do exist are principally in Russian-language sources and, therefore, are inaccessible to most Western readers.

Primarily using Soviet sources, Major Gebhardt has written a comprehensive study of the 1944 Soviet offensive conducted to clear German forces from the approaches to Murmansk. Its focus is at the operational level of war, with emphasis on the peculiar demands of arctic terrain on commanders and soldiers. Major Gebhardt also used German war diary reports to add clarity and perspective to the Soviet accounts.

Leavenworth Paper No. 17 contains something for almost every reader. It describes the employment on arctic terrain of light infantry, infantry, armor, artillery, engineers, logistic support, air power, naval infantry (Soviet marines), amphibious forces, and special-purpose forces. In three weeks of often intense fighting, supported by units of the Northern Fleet, the Red Army inflicted significant personnel and materiel losses on the German force and drove it from Soviet and northern Norwegian territory. This operational account provides the U.S. Army with the opportunity to review the lessons the Soviets have drawn from this arctic battle. It enables leaders at all levels to view the problems of arctic warfare from their own perspective and arrive at their own conclusions.



September 1989

LEONARD P. WISHART III  
Lieutenant General, USA  
Commandant

*Director*  
COL Richard M. Swain

*Professor of Combined Arms Warfare*  
Dr. Roger J. Spiller

*John F. Morrison Professor of Military History*  
Dr. Jerry M. Cooper

*Curriculum Supervisor*  
MAJ Harold W. Coyle



*ARNG Historian*  
MAJ Dwain L. Crowson, ARNG

*Instructor Team I*  
LTC Robert D. Ramsey III, Chief

*Instructor Team II*  
LTC Arthur T. Frame, Chief

LTC August W. Bremer Jr.      Dr. Jerold E. Brown  
LTC Michael W. Dunn      Dr. Christopher R. Gabel  
LTC James R. McLean      Dr. George W. Gawrych  
Dr. Samuel J. Lewis

LTC Richard V. Barbuto      Dr. Robert F. Baumann  
MAJ Stephen D. Coats      Dr. Gary J. Bjorge  
MAJ Neil V. Lamont      Dr. Thomas M. Huber  
Dr. Lawrence A. Yates

*Military History Education Committee*  
LTC Robert E. Gillespie, Chief

*Staff Ride Committee*  
Dr. William G. Robertson, Chief

MAJ Terry L. Siems      Dr. Jack J. Gifford  
MSG Larry D. Roberts      Dr. Michael D. Pearlman

LTC Edward P. Shanahan      LTC John I. Boxberger  
MAJ George E. Knapp

*Historical Services Committee*  
Dr. Robert H. Berlin, Chief

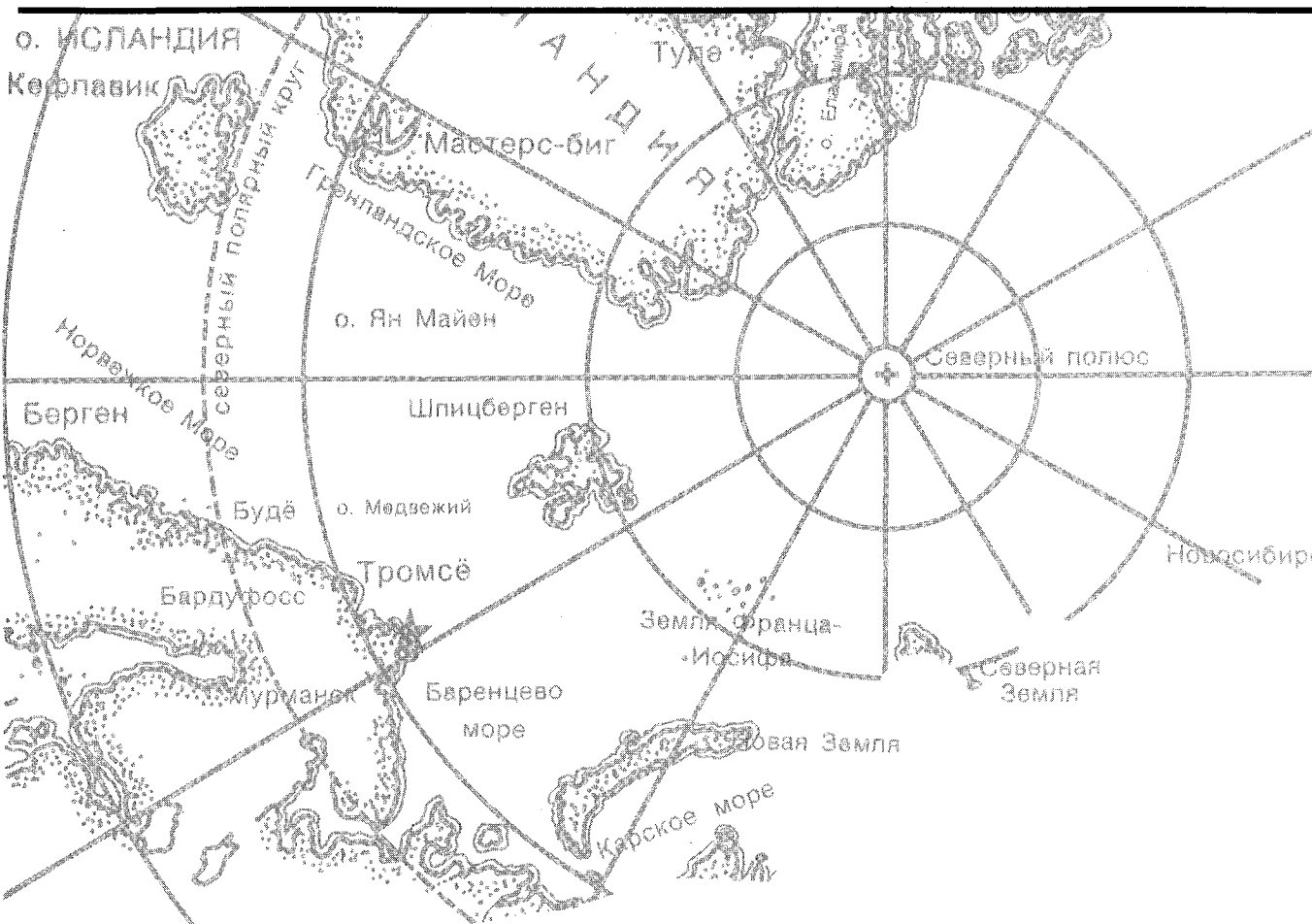
Elizabeth R. Snoko, Librarian      Marilyn A. Edwards, Editor  
Donald L. Gilmore, Editor

### *Staff*

SSG Kim E. Nyberg      Carolyn D. Conway  
Sharon E. Torres      April E. Ruzsa  
Joan R. Bazajou      Luella J. Welch

Leavenworth Papers are published by the Combat Studies Institute, U.S. Army Command and General Staff College, Fort Leavenworth, KS 66027-6900. The views expressed in this publication are those of the author and not necessarily those of the Department of Defense or any element thereof. Leavenworth Papers are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Leavenworth Papers US ISSN 0195 3451



## **The Petsamo-Kirkenes Operation: Soviet Breakthrough and Pursuit in the Arctic, October 1944**

**Major James F. Gebhardt**

**Combat Studies Institute**

U.S. Army Command and General Staff College  
Fort Leavenworth, Kansas 66027-6900

**Library of Congress Cataloging-in-Publication Data**

Gebhardt, James F., 1948-

The Petsamo-Kirkenes Operation : Soviet breakthrough and pursuit  
in the Arctic, October 1944 / James F. Gebhardt.

p. cm. — (Leavenworth papers ; no. 17)

Includes bibliographical references.

1. World War, 1939-1945—Campaigns—Norway—Kirkenes Region.
2. World War, 1939-1945—Naval operations, Russian.
3. Soviet Union—Armed Forces—History—World War, 1939-1945.
4. Germany—Armed Forces—History—World War, 1939-1945.
5. World War, 1939-1945—Campaigns—Arctic Regions.
6. Kirkenes Region (Norway)—History. I. Title. II. Series.

D763.N62K554 1990

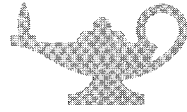
940.54'21845—dc20

89-18109

CIP

# Contents

---



Illustrations .....	v
Tables .....	vii
Preface .....	ix
Acknowledgments .....	xi
Introduction .....	xiii
Chapter	
1. Strategic and Operational Setting .....	1
Strategic Situation .....	1
Weather and Terrain .....	4
German Defensive Dispositions .....	6
Soviet Planning and Preparation .....	11
2. The Battle, Phase One, 7—15 October 1944 .....	31
3. The Battle, Phase Two, 18—22 October 1944 .....	47
4. The Battle, Phase Three, 23 October—1 November 1944 .....	65
Attack on Kirkenes .....	65
Southward Pursuit .....	75
5. Northern Fleet Support of Ground Operations .....	85
Command Relationship .....	86
Preparation .....	88
Amphibious Landings .....	89
Naval Air Operations .....	95
Naval Support of Army Logistic Operations .....	96
6. Soviet Special Operations .....	99
Karelian Front Special-Purpose Forces .....	99
Naval Special Operations .....	107
7. Conclusions .....	115
Strategic and Operational Planning .....	115
Soviet Command and Control .....	117
Combat Forces .....	119
Combat Support Operations .....	122
Conclusion .....	125

Epilogue .....	127
Appendix	
A. ....	131
B. ....	135
C. ....	139
D. ....	143
E. ....	145
F. ....	147
G. ....	149
Notes .....	151
Bibliography .....	171

# Illustrations

---



## Maps

1. German withdrawal from Finland .....	3
2. Petsamo-Kirkenes area of operations .....	5
3. Deployment of Soviet and German forces .....	7
4. Disposition of 2d Mountain Division units and Soviet units on the main axis .....	9
5. Karelian Front offensive plan .....	16
6. Phase one of the Soviet offensive .....	34
7. Phase two of the Soviet offensive .....	48
8. Movement of the 127th Light Rifle Corps, 21—22 October 1944 .....	61
9. 14th Army plan, phase three .....	66
10. 14th Army northern flank, 22—30 October 1944 .....	67
11. 14th Army southern flank, 23 October—2 November 1944 .....	77
12. Northern Fleet amphibious landings .....	91
13. 14th Army special-purpose actions .....	101
14. Krestovyi raid, 11—12 October 1944 .....	108

## Figures

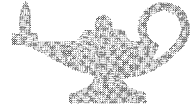
1. Organization of the German XIX Mountain Corps, October 1944 .....	6
2. Strongpoint Zuckerhutl .....	10
3. Organization of the Soviet 14th Army, October 1944 .....	13
4. STAVKA-Karelian Front-Northern Fleet command relationship .....	27
5. Karelian Front command and control relationships .....	28





# Tables

---



1. Status of German units on 1 September 1944 .....	8
2. Engineer plan, 99th Rifle Corps .....	23
3. Soviet planning estimate of force ratios .....	29
4. Actual Soviet-German force ratios .....	30
5. Artillery ammunition on hand, 367th Rifle Division, 18 October 1944 .....	50
6. Supply status of rifle divisions of the 31st Rifle Corps .....	78
7. Amphibious landings .....	90
8. Northern Fleet support for 14th Army logistic operations .....	96



# Preface

---



Leavenworth Paper No. 17, *The Petsamo-Kirkenes Operation: Soviet Breakthrough and Pursuit in the Arctic, October 1944*, represents a seminal contribution to a field of historical research that has not been thoroughly explored by our Army's doctrinal community. This campaign and others, such as the defense of the Murmansk axis in 1941, are virtually unknown in the West in spite of their profound impact on the strategic outcome of the Soviet-German war on the Eastern Front. This oversight is not surprising when one considers that our Army's sole combat experience in arctic-type terrain over the last fifty years was the Aleutian campaign of 1942.

The Arctic region increases in strategic value annually. The abundance of oil, minerals, and other natural resources in this region and its proximity to Europe and Asia make conflict in these areas of the world a possibility that military professionals must consider. The Petsamo-Kirkenes Operation is staple fare in Soviet military education. The Soviets' interest stems from a need for firsthand knowledge of the rigors imposed on men and machines during combat operations in the Arctic. Major Gebhardt's work should inspire other historical research in this area that will provide warfighting data to further refine our arctic doctrine.

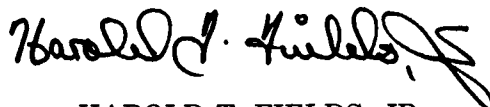
Contrary to the vast majority of the U.S. peacetime exercise experience in northern regions, the Petsamo-Kirkenes campaign was not fought in the bitter cold and darkness of the arctic winter. Nevertheless, geoclimatic conditions still adversely affected the two opposing armies, even in the arctic autumn. Hypothermia, extended and austere lines of communication, and marginal trafficability are endemic to northern operations and must be considered by commanders, regardless of the season. While lightweight tracked vehicles and helicopters have provided considerable improvements to tactical mobility and unit-level logistic support, the present-day foot soldier is still confronted with the requirement to carry backbreaking loads across the tundra. The ninety-pound rucksack carried by Soviet light infantrymen in 1944 was duplicated by British paratroopers in the Falkland Islands and is similarly shouldered by U.S. Army arctic light infantrymen today. Centers of gravity and culminating points will continue to be profoundly affected by weather and terrain. Therefore, commanders at all levels must con-

tinually consider the calculus of exposure and exhaustion on unit combat effectiveness.

This Leavenworth Paper emphasizes another maxim of arctic operations: the necessity for effective joint operations and proper synchronization of the various battlefield operating systems. Soviet use of artillery was hindered in its range by limited ground mobility. While our light artillery today is less road bound, it still may find itself unable to support maneuver forces effectively because of terrain obstacles or the unavailability of helicopter lifts during adverse weather. Since heavy artillery will probably continue to be road bound, close air support and joint air attack team operations are increasingly significant as distances are extended. Air defense artillery systems may be the only protection against hostile air if local weather conditions close friendly airfields.

The combat engineer, always a vital player on the modern battlefield, is a central figure in the Arctic. Combat engineers establish and maintain the roads and airfields that are essential for effective lines of communication to prosecute a campaign. Without a herculean engineering effort, the logistician cannot support any operational plan—no matter how simple its concept. With effective engineering support, the logistician can cope with the substantial demands of the combat arms, albeit with great frustration and difficulty.

This Leavenworth Paper illustrates the demanding requirements imposed by arctic operations and also demonstrates that insightful commanders can achieve significant results in decentralized operations when they allow their subordinates sufficient flexibility to seize the initiative.



HAROLD T. FIELDS, JR.  
Major General, USA  
Commanding General  
6th Infantry Division (Light)

# *Acknowledgments*

---



I wish to acknowledge the contribution and support of several people to the completion of this Leavenworth Paper. Colonel Louis D. F. Frasc  (U.S. Army, Retired) approved and resourced the research project, while Lieutenant Colonels John Hixson, William Connor, and James Holbrook (all U.S. Army, Retired), through their supervision, permitted research and writing to proceed at a steady pace in the midst of competing requirements. Office mates Lieutenant Colonel Gary Griffin (U.S. Army) and Dr. Jerold Brown of the Combat Studies Institute (CSI) provided unrelenting moral support and encouragement, as did Major William H. Burgess. Dr. Samuel Lewis, CSI, spent many hours translating German documents. Mary Jo Nelson of the Combined Arms Research Library, Fort Leavenworth, obtained countless books and articles through interlibrary loan. My colleagues at the Soviet Army Studies Office provided constructive criticism and encouragement during the rewriting of the manuscript. Luella Welch, CSI, typed the manuscript several times; Marilyn Edwards, CSI, edited the final manuscript; Elizabeth Snoke, CSI, edited the notes and bibliography; and Robin Inojos, assisted by John Thomas, of the Fort Leavenworth Media Support Center prepared the cover, maps, and figures. The Sor-Varanger Museum in Strand, Norway, permitted the use of several photographs as did the All-Union Agency for Author's Rights (VAAP) of the Union of Soviet Socialist Republics. Photographs of the author's collection were taken during the field research trip in October 1987.

JAMES F. GEBHARDT  
Major, Armor  
Fort Leavenworth, Kansas

---



Author's collection

***“To the courageous Soviet soldiers in memory of the liberation of the city of Kirkenes, 1944”***

# Introduction

---



*Where the reindeer has gone—there also will go the Russian soldier, and where the reindeer will not go—just the same the Russian soldier will go.*

*V. Suvorov<sup>1</sup>*

On 7 October 1944, a Soviet combined arms force of 97,000 men of the Karelian Front launched an offensive against the 56,000-man German XIX Mountain Corps, defending in prepared positions on Soviet territory northwest of Murmansk. Assisted by sea, air, and land forces of the Northern Fleet, the Soviet 14th Army defeated the German forces in a three-phased, 24-day operation. Soviet troops captured the Finnish town of Petsamo on 15 October and occupied the Norwegian port of Kirkenes on 25 October. The Petsamo-Kirkenes Operation, as the Soviets have named it, is important in Soviet military history. It was the “tenth crushing blow of 1944,” the last in a series of strategic offensive operations conducted by Soviet armed forces that year.<sup>2</sup>

Because this battle is the largest in modern military history fought north of the Arctic Circle, its study is more than a historical exercise. For Soviet military professionals, the Petsamo-Kirkenes Operation provides a model for the study of warfare on arctic terrain. It is the empirical base for their arctic warfare doctrine. Soviet military texts cite historical examples from this operation in support of discussions concerning combat activities in the northern regions.<sup>3</sup>

No equivalent operation exists in the American military experience. In the summer of 1943, in the Aleutians campaign, for example, approximately 16,000 American soldiers of the 7th Infantry Division fought against approximately 9,000 Japanese soldiers on the islands of Attu and Kiska, which lie several hundred miles south of the Arctic Circle.<sup>4</sup> The ground combat actions of this campaign, though violent, were brief, and tactical rather than operational in scope.

The closest American soldiers have ever come to warfare on arctic terrain was in September 1918 when some 5,000 men were sent to Archangel, Russia, as part of the Allied intervention in the Russian Civil War.<sup>5</sup> Archangel lies

135 miles below the Arctic Circle, and the combat zone extended another 200 miles southward in forested terrain. These American troops fought in what is now labeled a "low-intensity conflict," characterized by infantry actions at the small-unit level.<sup>6</sup> Analysis of this combat tends to emphasize its cold-weather aspects.<sup>7</sup>

U.S. Army doctrinal publications reflect this lack of experience in large-scale operations on arctic terrain. The most recent version of Field Manual (FM) 100—5, *Operations*, treats operations on arctic terrain as a subset of winter warfare.<sup>8</sup> The same is true of the preliminary draft of FM 90—11, *Cold Weather Operations*.<sup>9</sup> Both manuals tend to dwell on the impact of cold, ice, and snow on military operations, largely ignoring the fact that arctic regions are not always cold. Neither manual, for example, addresses the difficulties of conducting operations on arctic terrain in the summer, when topography, soil type, and light conditions, not low temperatures and snow, affect the employment of military forces.

This oversight is important for significant reasons. First, in the absence of doctrine, armchair tacticians and strategists tend to invent it. For example, a scenario in a recently published article suggests that the Soviet Union could land several conventional motorized rifle and tank divisions on Alaska's northern coast and drive them southward across several hundred miles of arctic terrain into the Canadian heartland.<sup>10</sup> The authors of this scenario offer no evidence that a movement of this magnitude across Alaskan terrain is possible, while the experience of the Red Army with only a hundred or so armored vehicles in the Petsamo-Kirkenes Operation clearly suggests that it is not.

More important, however, is that U.S. Army units have contingency or mobilization missions to fight on arctic terrain. The commanders and staffs of these units need guidance on how to plan, organize, and conduct military operations on arctic terrain, whether in the dark cold of winter or in the warm light of a long summer night. If such guidance now exists, it is in the institutional memories of units and commanders and is based on exercise experience rather than on combat experience. This guidance certainly is not in the doctrinal publications where it is needed.

In his essay "On Historical Examples," Carl von Clausewitz wrote:

Historical examples clarify everything and also provide the best kind of proof in the empirical sciences. This is particularly true of the art of war. . . . The detailed presentation of a historical event, and the combination of several events, make it possible to deduce a doctrine: the proof is in the evidence itself.<sup>11</sup>

The purpose of this Leavenworth Paper, then, is to provide the evidence by way of a comprehensive analysis of a large-scale military operation conducted on arctic terrain. It does not suggest that a doctrine can be deduced from this single experience but, rather, that a historical example is an excellent place to begin in order to arrive at an empirically based doctrine.

Little has been written about the Petsamo-Kirkenes Operation in English. Typical of what is available is the six-page description, drawn entirely from



the German perspective, contained in Department of the Army Pamphlet No. 20—271, *The German Northern Theater of Operations, 1940—1945*, by Earl F. Ziemke, published in 1959.<sup>12</sup> Dr. Ziemke summarized this account in a subsequent work, *Stalingrad to Berlin: The German Defeat in the East*, published in 1968.<sup>13</sup> Other American military historians have, for the most part, ignored the history of this operation.

The opposite is true in the Soviet Union. Two rifle corps commanders collaborated to write a single-volume detailed analysis of the Petsamo-Kirkenes Operation, which was first published in 1959.<sup>14</sup> It was followed in 1963 by a monograph on the war in the Murmansk sector, which added considerably more information to the public record.<sup>15</sup> Since 1963, the Soviet military press has published scores of articles and books pertaining to this operation so that it is now a widely known and discussed campaign in Soviet military historiography. Although the Soviets have published the texts of only a few documents relating to this offensive, many participants have written memoirs, including the commanders of both the Karelian Front and the Northern Fleet, Marshal K. A. Meretskov and Admiral A. G. Golovko, respectively. Lieutenant General Kh. A. Khudalov, the commander of a rifle division on the main axis of the 14th Army, also wrote a detailed memoir in 1974 that provides many insights into the battle at his level. These and many other eyewitness reports, when combined with secondary accounts, many of which are based on archival sources, provide a detailed and fairly objective historical record.

German military records, contained in microfilm collections of the National Archives and Records Administration, provide the other perspective of this operation. Microfilm copies of records and after-action reports exist for the 2d Mountain Division, the unit that received the Soviet main attack, and the Twentieth Army. The only records that survived for the XIX Mountain Corps, the 6th Mountain Division, and other major commands are those in the folders of the Twentieth Army. The German documents were used to establish the strength, location, and mission of the German major units and, after that, to act as a "quality check" on Soviet claims and assertions.

The reasons for relying primarily on Russian-language Soviet accounts are both practical and philosophical. The author of this Leavenworth Paper can read Russian fluently and, therefore, was able to fully exploit every available Russian-language source. On the other hand, all German-language materials had to be translated by another scholar, who did so willingly as a professional courtesy. More important, however, this operation was a Soviet offensive, and its planning and conduct is the focal point of the study.

This work focuses on the operational level of war, with infrequent excursions up to the strategic level and down to the tactical level. It does not discuss the care, feeding, and leading of individual soldiers or small units in a cold-weather environment. It does discuss the employment of infantry, light infantry, tanks and self-propelled guns, towed artillery, engineers, air power, ground and naval special-purpose forces, naval infantry (Soviet marines), and logistic support elements in an operational-level setting.

This Leavenworth Paper begins with a description of the strategic and geographical environment, outlines the deployment of both sides' forces on the terrain, and then gives an account of the three phases of the offensive (chapters 1, 2, 3, and 4). Chapter 5 explains the important contribution of the Northern Fleet to the success of the ground offensive. In chapter 6, a detailed and documented account of Soviet special operations is addressed. The concluding chapter is an analysis that draws on Soviet accounts as well as the author's introspection.

The lessons of the Petsamo-Kirkenes Operation are widely applicable. The very ground over which the battle was fought in 1944 is still strategically important to both NATO and Soviet military planners. Northern Norway guards NATO's left flank, as well as the approaches to the Greenland-Iceland-United Kingdom Gap, through which the Soviet Northern Fleet must pass to enter the North Atlantic Ocean.<sup>16</sup> From the Soviet point of view, the Petsamo-Kirkenes terrain guards the approaches to the headquarters of the Northern Fleet at Poliarnyi, the large port and industrial center of Murmansk, and the strategically vital Kola Peninsula.

However, this study has other applications. The U.S. Army sees light infantry as the "weapon of choice" for arctic warfare. The Red Army employed light infantry in this operation, with mixed results. The joint operations aspects of this battle merit study in their own right, as does the employment of special operations forces. Finally, the operational-level principles that governed the conduct of the Petsamo-Kirkenes Operation are equally relevant to the employment of non-Soviet military forces on arctic terrain in this or other parts of the world, now and in the future.

---